

New Jersey Department of Environmental Protection

Mission Statement

Vision: The Department of Environmental Protection is committed to providing a high quality of life for the residents of New Jersey.

Mission: To assist the residents of New Jersey in preserving, sustaining, protecting and enhancing the environment to ensure the integration of high environmental quality, public health and economic vitality. We will accomplish our mission in partnership with the general public, business, the environmental community and all levels of government by:

- ☐ Developing and integrating an environmental master plan to assist the Department and our partners in decision-making through increased availability of resource data on the Geographic Information System.
- ☐ Defining and publishing reasonable, clear and predictable scientifically-based standards.
- ☐ Achieving the Department's goals in a manner that encourages compliance and innovation.
- ☐ Employing a decision-making process that is open, comprehensive, timely, predictable and efficient.
- ☐ Providing residents and visitors with affordable access to safe and clean open space, and historic and natural resources.
- ☐ Assuring that pollution is prevented in an efficient and practical way.
- ☐ Assuring that the best technology is planned and applied to achieve long-term goals.
- ☐ Assuring that non-treatable wastes are isolated, managed and controlled.
- ☐ Enhancing environmental awareness and stewardship through education and communication.
- ☐ Fostering a work environment that attracts and retains dedicated and talented people.
- ☐ Committing to an ongoing evaluation of the Department's progress toward achieving our mission.



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Executive Summary

The *Publicly Funded Cleanups Site Status Report 2001* summarizes the work conducted at all contaminated sites addressed by the New Jersey Department of Environmental Protection (NJDEP) Division of Publicly Funded Site Remediation through December 31, 2001. The **Introduction** details the progress that has been made cleaning up contaminated sites in New Jersey using public funds. The **Site Highlights** portion of the Introduction features photographs and diagrams of remedial work recently conducted at half a dozen sites. The **Site Descriptions** section summarizes the statuses of 235 active sites as of December 31, 2001, including 53 sites in the federal Superfund program that are being jointly addressed by the United States Environmental Protection Agency (USEPA) and NJDEP. Completed cleanups and other sites where NJDEP and USEPA expended public funds but which are not included in the Site Descriptions section are documented in the **Site Listings** section. The **Appendixes** summarize all of the remedial work conducted by the Division of Publicly Funded Site Remediation in a table format.

Topics covered in the Introduction section of this report include:

Site Characterizations Completed in 2001.

NJDEP's Division of Publicly Funded Site Remediation and USEPA completed site characterization (investigation and design) work at a total of 18 sites during 2001. Remedial Investigations/Remedial Action Selections to define the nature and extent of the contamination and evaluate remedial alternatives were completed by NJDEP for nine non-Superfund sites. NJDEP completed Remedial Designs for seven non-Superfund cleanups and USEPA completed Remedial Designs for two Superfund cleanups during this time.

Remedial Actions and Operations and Maintenance Projects Conducted in 2001.

Altogether, NJDEP's Division of Publicly Funded Site Remediation and USEPA completed 19 Remedial Action/Construction projects at Superfund and non-Superfund sites during 2001 at a cost of approximately \$10.3 million, and conducted Operation and Maintenance and Long-Term Remedial Action projects at 45 sites at a cost of approximately \$12 million. USEPA also completed \$1.3 million in Removal Actions at six sites during Federal Fiscal Year 2001.

Superfund Site Cleanup Progress. As of December 31, 2001, 75 percent of the areas of environmental concern, or "subsites", at Superfund sites that were fully or partially

DPFSR Mission Statement

The mission of the Division of Publicly Funded Site Remediation (DPFSR) is to plan, manage and oversee publicly funded and publicly administered contaminated site investigations and cleanups pursuant to and in conformance with all applicable state and federal laws, rules and regulations. DPFSR offers support for all remedial activities undertaken by NJDEP by ensuring that technically, geologically and scientifically justified cleanup objectives are met.

In addition, DPFSR assists the Department of Treasury in procurement activities and provides assistance to the public through community outreach and information systems, and provides assistance to the regulated community and the public on health and safety issues.

addressed with public funds by USEPA and NJDEP had been completely cleaned up or were undergoing long-term measures that rendered the environmental or health hazards under control. The remaining 25 percent of subsites at these Superfund sites were in the investigation stage, design stage, or were undergoing short-term remedial actions or construction activities, except for one subsite that had no work initiated at the end of the year.

Non-Superfund Site Cleanup Progress. By the end of 2001, 68 percent of subsites at non-Superfund sites that were fully or partially addressed with public funds by NJDEP had been completely cleaned up or were undergoing long-term measures that rendered the environmental or health hazards under control. The remaining 32 percent of subsites at these non-Superfund sites were in the investigation stage, design stage, or were undergoing short-term remedial actions or construction activities, except for one subsite

that had no work initiated at the end of the year.

Funding Information for 2001. NJDEP's Site Remediation Program authorized the commitment of approximately \$27 million in Corporate Business Tax revenues in 2001 to implement publicly funded site investigation and cleanup work. USEPA allocated almost \$94 million in federal money for site characterization and cleanup work at publicly funded Superfund sites in New Jersey during Federal Fiscal Year 2001. Since 1981, approximately \$1.8 billion in Superfund money has been authorized for characterization and cleanup work at contaminated sites in New Jersey.

NJDEP issues the Publicly Funded Cleanups Site Status Report annually pursuant to P.L. 1997, chapter 234, the state legislation that authorized appropriations of the New Jersey Corporate Business Tax for NJDEP site investigations and cleanups.

A Little League game is underway at Pepe Field in Boonton Town, Morris County. USEPA recently conducted a Superfund cleanup at the site, which included restoration of the ball park.



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Introduction



Section I

Publicly Funded Cleanups in New Jersey

For more than twenty years, NJDEP has worked diligently to identify, investigate and clean up contaminated sites in the state of New Jersey. NJDEP's Site Remediation Program currently maintains a list of more than 12,000 sites that are confirmed to be contaminated and are undergoing a remedial investigation or a cleanup, or are awaiting assignment to a NJDEP case manager. The *Known Contaminated Sites in New Jersey* report lists sites ranging from residences and small commercial businesses with leaking underground fuel storage tanks, to old industrial facilities with extensive historical contamina-

tion, to large hazardous waste landfills with the potential of polluting millions of gallons of ground water. The Site Remediation Program's Division of Responsible Party Site Remediation oversees the cleanup of these contaminated sites by responsible parties using private funds, while the Division of Publicly Funded Site Remediation addresses sites where the responsible parties are unknown, or unwilling or unable to finance the remedial work. These efforts help ensure safer neighborhoods and work places and protect New Jersey's valuable drinking water supplies.

The *Publicly Funded Cleanups Site Status Report 2001* summarizes the work accomplished at sites addressed under the Division

Origins of the Site Remediation Program

In the late 1970s and early 1980s, public support for a coordinated cleanup effort and pioneering state and federal laws enabled NJDEP to establish a progressive program to address contaminated sites. Beginning with the passage of the New Jersey Spill Compensation and Control Act in 1976, the state initiated the first program in the country for the cleanup of contaminated sites that posed a danger to human health and the environment. This program became a national model. For the first time serious consideration was given to reversing decades of industrial, commercial and household waste mismanagement that resulted in discharges of hazardous substances into the environment.

Following New Jersey's lead, the federal government created a program to provide financial aid and technical guidance in cleaning up the nation's more serious contaminated sites. Enacted in 1980, the law is called the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), more commonly known as Superfund. This program was strengthened in 1986 by the Superfund Amendments and Reauthorization Act (SARA).

As the universe of potentially contaminated sites in New Jersey continued to increase from an original inventory of about 1,200 sites, NJDEP expanded its cleanup efforts to meet the challenges posed by a variety of pollution problems. The passage of several key state laws facilitated these endeavors, including the Environmental Cleanup Responsibility Act (later replaced by the Industrial Site Recovery Act) and the Underground Storage Tank Act. Also, a Voluntary Cleanup Program started in 1993 facilitates cleanup of contaminated sites, including many brownfield projects, by private parties and municipalities under Site Remediation Program oversight. The Brownfield and Contaminated Site Remediation Act of 1998 further refined the overall remedial process and stimulated cleanup and reuse of additional brownfield sites. The inventory of sites maintained by the Site Remediation Program for general reporting purposes includes more than 38,000 sites, of which more than 25,000 received No Further Action designations from NJDEP as of December 31, 2001.

of Publicly Funded Site Remediation through December 31, 2001. It covers sites that are being investigated and cleaned up by NJDEP using Hazardous Discharge Bond Fund money, Corporate Business Tax revenues, Spill Fund money and other monies authorized for work at publicly funded sites. It also details the work being conducted at publicly funded Superfund sites in New Jersey, which are addressed jointly by NJDEP and USEPA primarily with federal Superfund money. Sites that have been fully addressed under the Division of Publicly Funded Site Remediation and require no further action or were transferred from the publicly funded division to the responsible party division are listed to provide complete documentation of the cleanup work conducted in New Jersey using public funds.

The Universe of Publicly Funded Sites

The universe of sites covered in the *Publicly Funded Cleanups Site Status Report 2001* is presented in Figure 1. As of December 31, 2001, 381 sites in New Jersey were either being actively investigated or cleaned up or had been fully addressed using public funds. The active site category includes 53 Superfund sites and 181 non-Superfund sites where soil, ground water and other environmental media are being addressed, and one non-Superfund "site" that consists of 53 separate properties in Hudson County that are contaminated with chromium. Also included in the active site category are 50 Water Supply sites, which are potable well contamination

areas where NJDEP has provided residents with alternate drinking water supplies or water treatment systems, and has investigated or will be investigating the sources of the contamination. The fully remediated category is comprised of six former Superfund sites that have been deleted from the National Priorities List and where all post-cleanup monitoring work has been completed, and 38 non-Superfund sites where all work has been completed.

Detailed descriptions of the active Superfund and non-Superfund sites are presented in Section II of this report. Information on the Water Supply cases, including the primary contaminants of concern and the action taken by NJDEP to supply clean drinking water, is provided in the Site Listings section of this report (Section III). Lists of the fully remediated sites and the sites that were initially addressed by the Division of Publicly Funded Site Remediation before being transferred to the Division of Responsible Party Site Remediation for completion with private funds are also included in Section III.

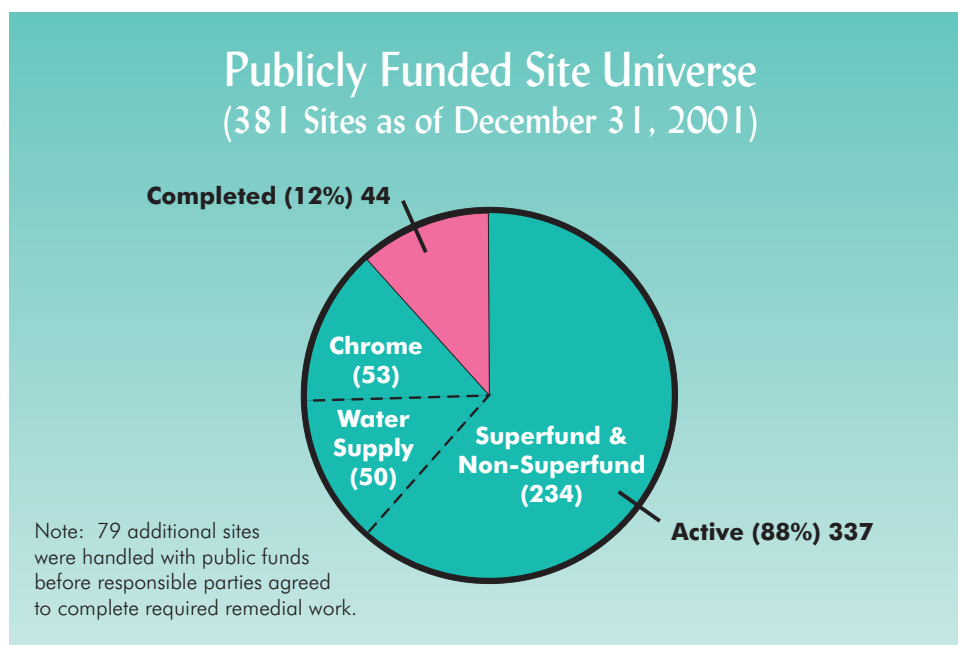


Figure 1

The Remedial Process

It is important to understand the sequence of events that make up the remedial process when evaluating the cleanup progress at publicly funded Superfund and non-Superfund sites. A site consists of one or more subsites (sometimes referred to as Operable Units at Superfund sites) that represent individual areas of environmental concern. While a subsite can focus on any environmental hazard, typical examples include contaminated ground water, contaminated soil, leaking underground storage tanks, buried drums, abandoned containers of chemical wastes, off-site potable wells or an Immediate Environmental Concern (IEC) condition. A subsite may be identified at the beginning of a site investigation or at any time during the course of the remedial process additional environmental problems are discovered.

Once a site or subsite has been identified, it undergoes one or more of the following steps to characterize the extent of the contamination and/or remediate the environmental or health hazards. The phase of the remedial process that is underway determines the current status of the site or subsite. The site or subsite is assigned a **Completed** status when all remedial work is finished and the environmental and health hazards are fully addressed.

A **Remedial Investigation and Feasibility Study (RI/FS)** is a study conducted at Superfund sites to determine the nature and extent of the contamination and evaluate cleanup alternatives. The environmental problems at a site or subsite are characterized during the Remedial Investigation. The effectiveness, implementability, timeliness, cost and community concerns associated with each cleanup alternative are considered during the Feasibility Study. A Remedial Investigation is also implemented at non-

Superfund sites to determine the nature and extent of the contamination, but a **Remedial Action Selection (RAS)** is conducted instead of a Feasibility Study. All publicly funded actions and most privately funded actions at non-Superfund sites require an RAS prior to selecting and implementing a cleanup plan. After selecting a preferred remedial alternative for a publicly funded Superfund or non-Superfund site based on how well it meets the stipulated evaluation criteria, NJDEP (or in the case of federal-lead Superfund sites, USEPA) will hold a public comment period on the proposed cleanup plan.

A **Remedial Design** is the development of engineering plans and specifications to implement the remedy selected in the Feasibility Study or Remedial Action Selection, such as sizing a ground water treatment plant or developing an accurate measurement of contaminated soil that must be removed for off site disposal. Further data collection and analysis may be required to finalize design specifications.

A **Remedial Action** (sometimes referred to as a Construction project) is the implementation of a selected remedy. A Remedial Action may be implemented immediately after a site is identified, such as a source removal at an Immediate Environmental Concern (IEC) site, as an interim remedial measure while a site is being investigated, or as a final cleanup measure after a formal Remedial Design has been completed.

A Remedial Action may include, but is not limited to, the following activities:

- Installation of a ground water treatment system
- Installation of a soil treatment system (i.e., soil flushing or soil vapor extraction)
- Removal of contaminated soil or drums
- Installation of a landfill cap or slurry wall

- Removal of leaking underground storage tanks
- Installation of a permanent cover over contaminated soil
- Installation of a ventilation system in a building or other structure where hazardous vapors are present
- Installation of Point-of-Entry Treatment (POET) systems on private potable wells
- Demolition of buildings or other structures when needed to facilitate remediation of the site
- Fencing of a site to prevent access

In addition, the extension of water lines to a ground water contamination area or installation of a treatment system on a contaminated municipal supply well by a municipality or local water purveyor using funds provided by NJDEP are considered Remedial Actions.

NJDEP soil cleanup criteria have been established for many contaminants to guide unrestricted, limited use and restricted Remedial Actions for soil. This allows cleanup and reuse of some sites, such as former industrial complexes, at lower costs, while still protecting human health and the environment. A Deed Notice (formerly called a Declaration of Environmental Restriction) is imposed for sites that only comply with the restricted soil criteria (a limited restricted Remedial Action). It is also imposed when engineering controls at sites with soil contamination levels that exceed the restricted criteria adequately protect public health and the environment (a restricted Remedial Action). This notice ensures the disclosure of site conditions to future owners and the maintenance of required engineering controls.

Certain exceptions for contaminated ground water can also be obtained depend-

ing on its use. A Classification Exception Area (CEA) is established at sites when ground water contaminant levels exceed state ground water quality criteria, but there is an expectation that over time such standards will be met.

The state funds 10% of the Remedial Action costs at Superfund sites, with USEPA providing the rest. NJDEP funds 100% of the Remedial Action costs at non-Superfund sites. When parties responsible for contamination at these sites are identified, NJDEP brings legal action to recover the expended funds.

Operation and Maintenance (O&M) are performed at sites where long-term cleanup actions are underway or environmental controls have been installed. O&M covers a wide range of activities, from overseeing the proper functioning of a ground water treatment system to cutting the grass on a landfill cap. O&M may also include the environmental monitoring conducted to evaluate the effectiveness of a remedial action. One example of this is the periodic sampling of ground water that is conducted after a leaking underground storage tank or other source of contamination has been excavated, or after a plume of contaminated ground water has been remedied through active treatment. At sites where restricted cleanups are conducted, O&M may continue indefinitely. The state funds 100% of O&M costs at Superfund and non-Superfund sites.

Long-Term Remedial Action (LTRA) denotes O&M activities performed on large-scale ground water extraction and treatment plants at Superfund sites. These treatment plants are projected to run for several years until ground water cleanup criteria are achieved. For the first 10 years, USEPA funds 90 percent of LTRA costs and the state provides the remaining 10 percent. After ten years the site is considered in O&M and the state funds 100 percent of these costs.

Publicly Funded Cleanup Activity in 2001

Following is a summary of the publicly funded cleanup activities that were conducted by NJDEP and USEPA between January 1 and December 31, 2001. These include Remedial Investigation/Remedial Action Selections, Remedial Designs and Remedial Actions that were completed, as well as the Operation and Maintenance/Long-Term Remedial Action projects that were underway. (Unknown Source Investigations that were completed in 2001 are summarized in the Site Listings section of this report.) In addition, Removal Actions conducted by USEPA using public funds during Federal Fiscal Year 2001 are discussed.

Site Characterizations Completed in 2001

The term "Site Characterization" encompasses several activities in the remedial process: the Remedial Investigation/Remedial Action Selection phase (or in the case of Superfund sites, the Remedial Investigation/Feasibility Study phase) and the Remedial Design phase. During 2001, nine

Remedial Investigation/Remedial Action Selections were completed by NJDEP for publicly funded sites. (No Remedial Investigation/Feasibility Studies were completed by NJDEP or USEPA for publicly funded Superfund sites in 2001.) NJDEP also completed Remedial Designs for seven non-Superfund sites and USEPA completed Remedial Designs for two Superfund sites during this time. Figures 2 and 3 list the sites where these activities were completed in 2001.

Remedial Investigation/Remedial Action Selection Reports Completed in 2001

Site Name	Municipality	County
35B Hendrickson Mill Road	Logan Township	Gloucester
Fuelmart Inc.	Jackson Township	Ocean
Haas Property Landfill	Southampton Township	Burlington
Minsei Kogyo Shoji	Woodland Township	Burlington
Noble Oil Company	Tabernacle Township	Burlington
Prospect Street GW Contamination	Montville Township	Morris
Schaffernoth's Nursery	East Amwell Township	Hunterdon
Stephen Drive & Linda Lane GW Contamination	Winslow Township	Camden
The Kings Path GW Contamination	Hopewell Township	Mercer

Figure 2

Remedial Design Reports Completed in 2001

Site Name	Municipality	County
398 Olden Avenue	Trenton City	Mercer
Beachwood & Veeder Aves GW Contamination	Dover Township	Ocean
Citgo Service Station Upper Township	Upper Township	Cape May
Eastwoods Development GW Contamination	Monroe Township	Gloucester
Federal Creosote Co. Superfund Site (OU1)	Manville Borough	Somerset
Hopewell Borough Water Department Well 4	Hopewell Borough	Mercer
Livingston Township Water Department Well 11	Livingston Township	Essex
Vineland Chemical Co. Superfund Site (OU1)	Vineland City	Cumberland
Winslow Road GW Contamination	Monroe Township	Gloucester

Figure 3

Remedial Action/Construction projects completed in 2001

During 2001, NJDEP and USEPA completed Remedial Action/Construction projects at 19 sites across the state at a cost of almost \$10.3 million. For example, at the Stor Dynamics and Grant Industries properties, which are located adjacent to one another in Elmwood Park Borough, Bergen County, NJDEP installed on-site systems to extract ground water that is highly contaminated with volatile organic compounds to prevent it from migrating to a nearby municipal supply well. At the Horseshoe Road Superfund site in Sayreville Borough, Middlesex County, USEPA demolished buildings and removed miscellaneous debris to facilitate the investigation and cleanup of the contaminated soil and ground water. A list of sites

where NJDEP and USEPA completed Remedial Actions/Construction projects in 2001 is presented in Figure 4. Details on the types of actions taken can be found in their respective site descriptions in Section II of this report.

Removal Actions performed by USEPA in Federal Fiscal Year 2001

Removal Actions are implemented by USEPA when materials immediately dangerous to human health, such as drums of hazardous wastes, are present at a site. Removal Actions may be performed at Superfund or non-Superfund sites under investigation by USEPA and/or NJDEP, or at any other location where materials presenting an immediate health hazard are discovered, such as vacant buildings, trailers, or industrial properties. USEPA uses federal Superfund money to conduct Removal Actions.

NJDEP and USEPA Remedial Action Projects Completed in 2001

Site Name	Municipality	County	Cost
2043 Ocean Heights Avenue	Egg Harbor Township	Atlantic	\$61,000
398 Olden Avenue	Trenton City	Mercer	\$148,000
Black Brook Treatment Plant	Hanover Township	Morris	\$1,575,000
Citgo Service Station Upper Township	Upper Township	Cape May	\$50,000
GESG Reclamation Materials, Inc.	Andover Township	Sussex	\$1,875,000
Grant Industries Inc.	Elmwood Park Borough	Bergen	\$25,000
Hopewell Borough Water Department Well 4	Hopewell Borough	Mercer	\$89,000*
Horseshoe Road Superfund Site	Sayreville Borough	Middlesex	\$550,000
Independence Township Ground Water Contamination	Independence Township	Warren	\$3,360,000
Ivins & Madison Avenues Ground Water Contamination	Egg Harbor Township	Atlantic	\$61,000
John L. Armitage Company	Newark City	Essex	\$50,000
Plaza Gas & Car Wash	Lower Township	Cape May	\$95,000
Route 22 Petroleum	Bridgewater Township	Somerset	\$45,000
Roycefield Road Ground Water Contamination	Hillsborough Township	Somerset	\$29,000
Southeast Boulevard Ground Water Contamination	Vineland City	Cumberland	\$91,000
Stor Dynamics	Elmwood Park Borough	Bergen	\$100,000
Tysley Road Ground Water Contamination	Bernardsville Borough	Somerset	\$21,000
US Coast Guard Repeater Station	Monmouth Beach Borough	Monmouth	\$150,000
Veronica Lane & Lillian Drive Ground Water Contamination	Monroe Township	Gloucester	\$1,917,000

* Represents partial payment from New Jersey Spill Fund. Total expenditure from the Spill Fund for this project is expected to be \$478,000.

Figure 4



An NJDEP contractor removes an underground storage tank from the Citgo service station in Upper Township, Cape May County. Gasoline from leaking tanks at the site contaminated soil and ground water, and is a possible source of volatile organic contamination in several nearby private potable wells.

Operation & Maintenance and Long-Term Remedial Actions conducted in 2001

During Federal Fiscal Year 2001 (October 1, 2000 to September 30, 2001), USEPA conducted Removal Actions at six sites in New Jersey at a cost of almost \$1.3 million, as listed in Figure 5. An example of one of these Removal Actions occurred at the Martin Aaron Superfund site in Camden City, where

NJDEP and USEPA conducted Operation and Maintenance and Long-Term Remedial Action activities at 45 publicly funded sites across the state in 2001, up from 38 sites in 2000. A list of these sites and the types of actions underway is provided in Figure 6. As indicated, several of the sites have more than one subsite in the Op-

eration and Maintenance or Long-Term Remedial Action phase. One example is the Combe Fill South Landfill Superfund site in Chester Township, Morris County, where NJDEP is conducting cap maintenance activities as well as monitoring and main-

USEPA Removal Actions Completed in FFY 2001

Site Name	Municipality	County	Cost
Mercury Trading Inc.	Hammonton Town	Atlantic	\$46,000
Martin Aaron Inc.	Camden City	Camden	\$170,000
Straight Street Site	Paterson City	Passaic	\$32,000
Schaeffer Salts	Union City	Hudson	\$250,000
Bayonne Drum & Barrel Co.	Newark City	Essex	\$700,000
Trenton City Vacant Building	Trenton City	Mercer	\$95,000

Figure 5

USEPA removed and disposed of drums containing flammable liquids and other hazardous substances. The drums remained from operations at the Rhodes Drum Company, a drum reconditioning facility that formerly occupied a portion of the Martin Aaron property.

taining Point-of-Entry Treatment (POET) systems on a number of nearby private potable wells that were contaminated with leachate from the landfill. The total cost to implement the Operation and Maintenance/ Long-Term Remedial Action activities at these 45 sites during 2001 was approximately

Operation, Monitoring & Maintenance Projects Underway

Project Name	Action	Type
1 603 Dumont Terrace	IEC Action	Non-Superfund
23 Kerhart Avenue	Ground Water Monitoring	Non-Superfund
243 North Texas Avenue	Free Product Recovery	Non-Superfund
5 Devon Avenue	Free Product Recovery	Non-Superfund
661 South Broad Street	Ground Water Monitoring	Non-Superfund
A-Z Automotive	Ground Water Pump & Treat, POET Maintenance	Non-Superfund
Amoco Service Station Milltown	Vapor Recovery	Non-Superfund
Amoco Service Union City	Ground Water Monitoring	Non-Superfund
Asbestos Dump	Cap Maintenance	Superfund
Big Hill Landfill	Cap, Methane Gas Collection System & Canterbury Pond Aerator Maintenance	Non-Superfund
Blue Bell Estates Ground Water Contamination	Potable Well Monitoring	Non-Superfund
Bog Creek Farm* LTRA	Ground Water Pump & Treat	Superfund
Burning Hollow Ground Water Contamination	POET Maintenance	Non-Superfund
Burnt Fly Bog	Site & Sediment Pond Maintenance	Superfund
Citgo Service Station North Brunswick	Ground Water Monitoring	Non-Superfund
Combe Fill North Landfill	Monitoring, Cap Maintenance	Superfund
Combe Fill South Landfill	Cap & POET Maintenance	Superfund
Cranberry Lake Ground Water Contamination	POET Maintenance	Non-Superfund
Denzer & Schafer X-Ray	Ground Water Monitoring	Superfund
Edgewood Village	Ground Water Monitoring	Non-Superfund
Ellis Property LTRA	Ground Water Pump & Treat	Superfund
Evor Phillips Leasing Co.	Ground Water Pump & Treat	Superfund
Exxon Service Station Lakehurst	Ground Water Pump & Treat, Vapor Recovery	Non-Superfund
Florence Land Recontouring Inc Landfill	Leachate, Methane Gas Collection, Cap Maintenance	Superfund
Garden State Cleaners* LTRA	Ground Water Pump & Treat	Superfund
Grant Industries	Free Product Recovery	Non-Superfund
Higgins Farm* LTRA	Ground Water Pump & Treat	Superfund
Holland Sales & Service Inc	POET Maintenance	Non-Superfund
Hope Auto Care	Ground Water Pump & Treat, Vapor Recovery	Non-Superfund
Hudson County Chromate (16 Sites)	Cap, Fence Maintenance	Non-Superfund
Imperial Oil Company Inc	Floating Oil Product Removal	Superfund
Jack's Auto Service Station	Free Product Recovery	Non-Superfund
John L. Armitage & Co.	Ground Water Pump & Treat, Building Ventilation	Non-Superfund
Lang Property * LTRA	Ground Water Pump & Treat	Superfund
McFarland's Service Station	Free Product & Vapor Recovery	Non-Superfund
Neighborhood Garage	Ground Water Pump & Treat, Vapor Recovery	Non-Superfund
Prices Landfill 1	Ground Water Pump & Treat	Superfund

(table continued on next page)

Figure 6

Operation, Monitoring & Maintenance Projects Underway (continued)

Project Name	Action	Type
Research Organics Inorganics	Ground Water Monitoring	Non-Superfund
Semonian Service Station	Vapor Recovery	Non-Superfund
South Jersey Clothing Company* LTRA	Ground Water Pump & Treat, Soil Vapor Recovery	Superfund
Stor Dynamics	Free Product Recovery	Non-Superfund
Syncon Resins	Ground Water Pump & Treat	Superfund
Vineland Chemical Company* LTRA	Ground Water Pump & Treat	Superfund
Welsbach & General Gas/Ste-Lar Building*	Site Maintenance	Superfund
Williams Property LTRA	Ground Water Pump & Treat	Superfund

*USEPA manages O&M/LTRA work at these sites.

POET-Point-of-Entry Treatment water filtration system

Note: Responsible Parties for the Lipari Landfill Superfund site in Mantua Township, Gloucester County and the Nascolite Corporation Superfund site in Millville City, Cumberland County are conducting O&M of the on-site ground water treatment systems using private funds. The Department of the Interior is conducting O&M of the cap at the Dietzman Tract (OU3) of the Asbestos Dump Superfund site in Harding Township, Morris County.

Figure 6 (continued)

\$12 million and was paid for with state funds and federal Superfund money.

As additional sites move past the Remedial Action/Construction phase, more of these long-term measures will be required to keep treatment systems running properly and ensure that environmental and health

hazards have been completely addressed. A list of publicly funded non-Superfund and Superfund sites in New Jersey where Operation and Maintenance/Long-Term Remedial Action activities have been completed is included in the Appendixes section of this report (Section IV).

One of the sites where long-term remedial action (LTRA) activities were conducted by USEPA in 2001 was at the Garden State Cleaners/South Jersey Clothing Company site in Atlantic County, where this ground water treatment/soil vapor extraction system was operated.



Cumulative Cleanup Progress

The Division of Publicly Funded Site Remediation tracks the progress NJDEP and USEPA have made addressing publicly funded sites over the years based on the cleanup statuses of the subsites that comprise the sites. Some subsites require only a short Remedial Action to fully address the contamination, while others require a series

of steps, from a Remedial Investigation/ Remedial Action Selection or Remedial Investigation/Feasibility Study to an Operation and Maintenance phase. The subsites for each site correlate to the bar charts beneath the site descriptions in Section II.

It is important to note that once a subsite is in the Operation and Maintenance or Long-Term Remedial Action phase, the environmental hazard presented by that subsite is

under control and is not a danger to human health or the environment. An example is the extraction and treatment of contaminated ground water, which prevents the plume from migrating off site while simultaneously removing the dissolved pollutants.

Figures 7 and 8 summarize NJDEP's and USEPA's progress in addressing publicly funded sites in terms of the number of subsites that have been completed and those that are underway. As of December 31, 2001, 75 percent of the subsites at the 81 Superfund sites that were fully or partially addressed using public funds were completely cleaned up or were undergoing long-term operation, monitoring and/or maintenance. This includes subsites at Superfund sites that were deleted from the National Priorities List

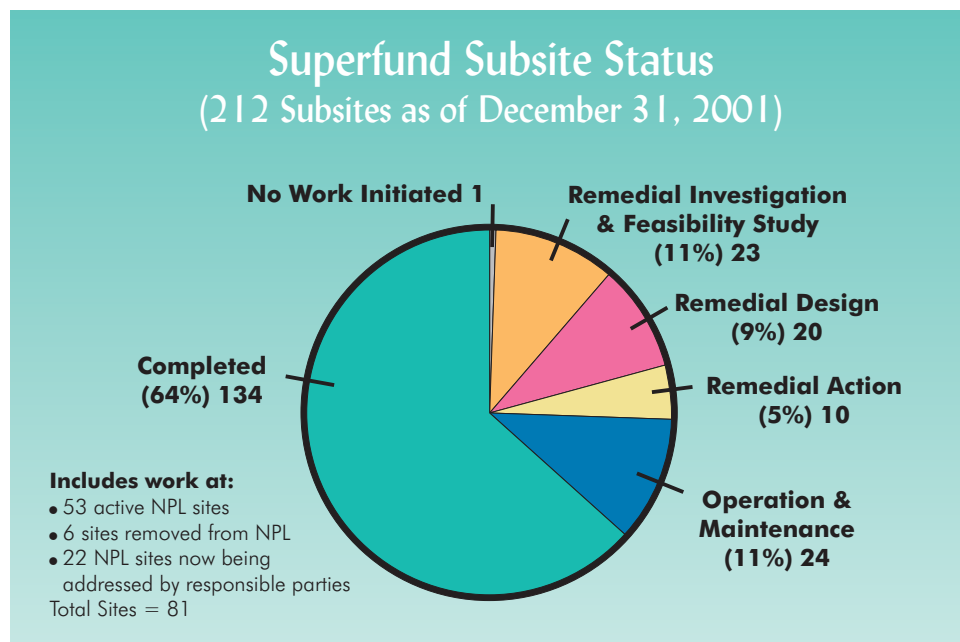


Figure 7

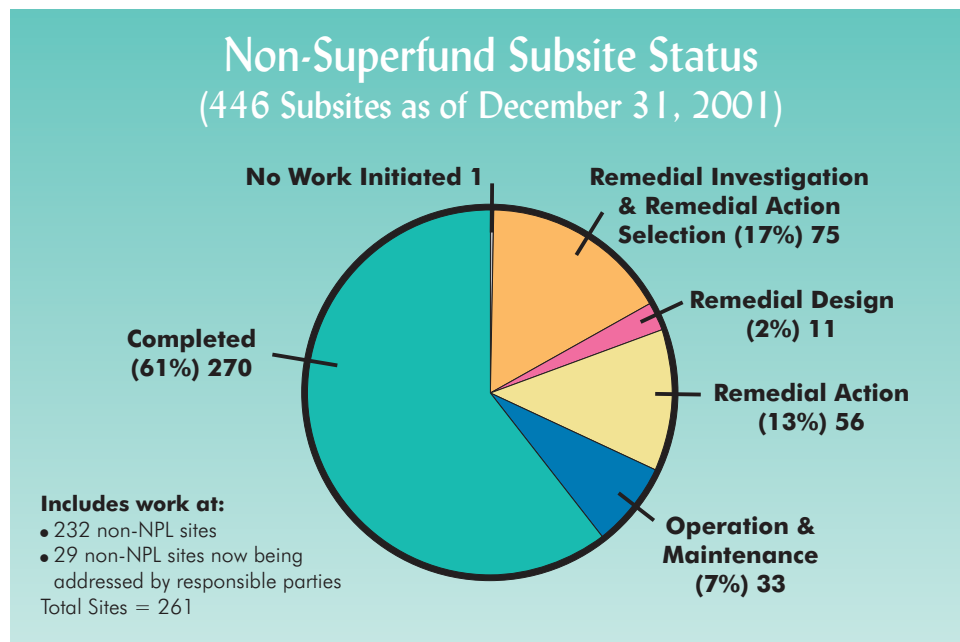


Figure 8

after remedial work was completed, as well as subsites at Superfund sites that were transferred to the Division of Responsible Party Site Remediation after initial work was conducted using public funds. The remaining 25 percent of subsites are part of active sites and were either in the Remedial Investigation/Feasibility Study, Remedial Design or Remedial Action stages, except for one subsite that had no work initiated by the end of 2001.

Likewise, 68 percent of the subsites at the 261 non-Superfund sites addressed with public funds were completed or were undergoing long-term operation, monitoring and/or maintenance at the end of 2001. This includes subsites at sites that were fully remediated as well as subsites that were completed before the cases were transferred to the responsible party division for oversight or redirection to other offices in NJDEP. The remaining 32 percent were in the Remedial Investigation/Remedial Action Selection, Remedial Design or Remedial Action stages, except for one subsite that had no work initiated by the end of 2001.

NJDEP's and USEPA's progress addressing publicly

funded sites may also be measured in terms of remedial phases completed and underway. This information is portrayed in Figures 9 and 10. Detailed lists of these projects are included in the Appendixes section of this report (Section IV).

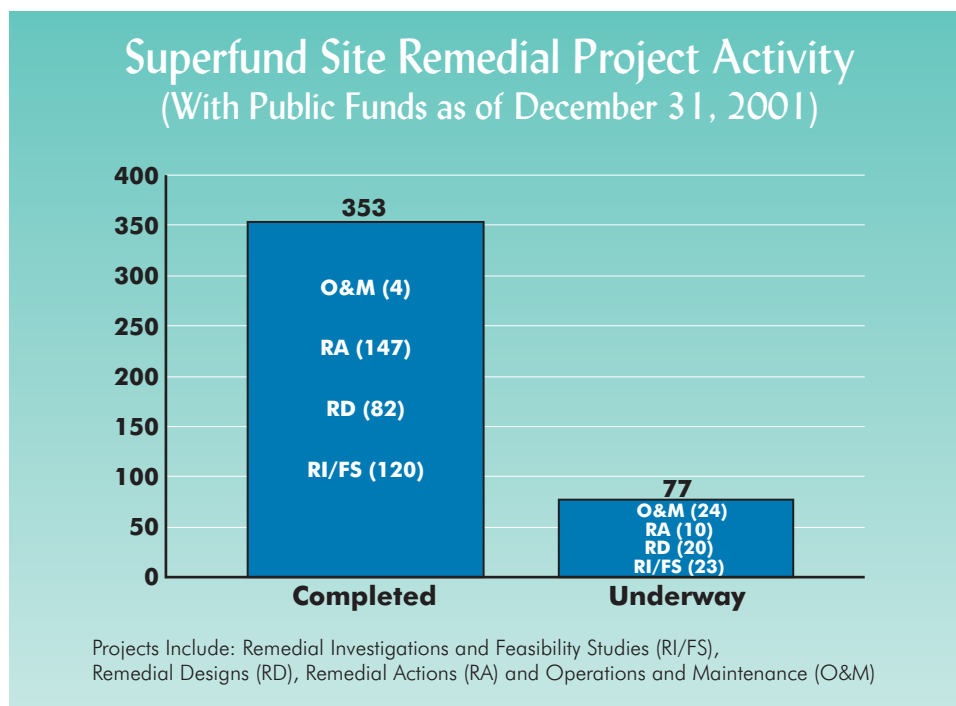


Figure 9

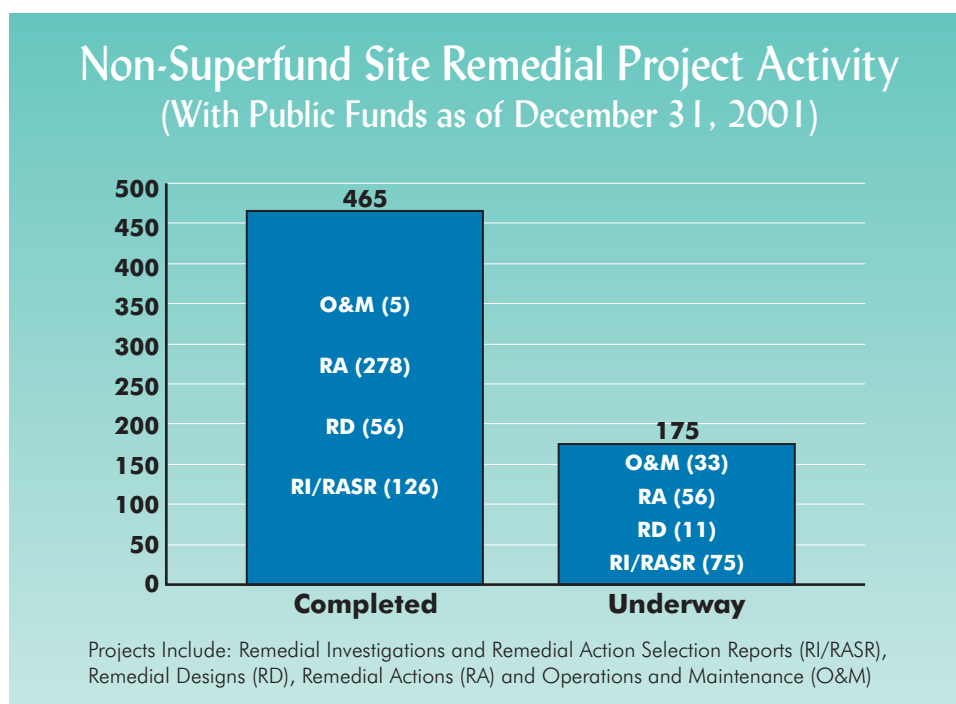


Figure 10

Funding Information for 2001

Two major sources of funding for the Division of Publicly Funded Site Remediation during 2001 were the New Jersey Corporate Business Tax and the federal Superfund program. The Site Remediation Program began receiving a percentage of the state's annual Corporate Business Tax receipts for site investigations and cleanups in 1998, after New Jersey voters approved a referendum to dedicate a portion of these revenues for environmental cleanup projects. Corporate Business Tax revenues help pay for all types of activities at publicly funded non-Superfund sites, from Remedial Investigation/Remedial Action Selections to Opera-

tion and Maintenance work. These revenues are also an important source of funding for publicly funded Superfund site cleanups, providing 10 percent matching funds for Remedial Actions and Long-Term Remedial Actions at a number of these sites and paying for Operation and Maintenance activities at others. NJDEP is allocated Corporate Business Tax revenues on a State Fiscal Year basis (July 1st through June 30th). Since Corporate Business Tax revenues were dedicated for site remediation activities, the Division of Publicly Funded Site Remediation has received annual allocations of between \$20 to \$25 million from this source. The federal Superfund program has provided funds for publicly funded Superfund sites in New

Superfund Cleanup Funding For Federal Fiscal Year 2001

Site	Cleanup Work	Amount
Cosden Chemical Coatings (Beverly City, Burlington County)	Excavation of contaminated soil	\$375,000
Federal Creosote (Manville Borough, Somerset County)	Excavation of contaminated soil	\$23,000,000
Garden State Cleaners (Buena Borough, Atlantic County)	Ground water extraction and treatment	\$700,000
Glen Ridge Radium Sites (Glen Ridge Borough, Essex County)	Excavation of contaminated soil	\$15,000,000
Higgins Farm (Franklin Township, Somerset County)	Ground water extraction and treatment	\$900,000
Lang Property (Pemberton Township, Burlington County)	Ground water extraction and treatment	\$1,300,000
Pepe Field (Boonton Town, Morris County)	Soil excavation/restoration of ball park	\$600,000
Roebling Steel Company (Florence Township, Burlington County)	Building decontamination	\$3,672,165
South Jersey Clothing Company (Buena Borough, Atlantic County)	Ground water extraction and treatment	\$700,000
US Radium Corporation (Orange City, Essex County)	Excavation of contaminated soil	\$9,440,000
Vineland Chemical Company (Vineland City, Cumberland County)	Construction of soil flushing system and ground water extraction and treatment	\$11,000,000
Welsbach/General Gas Mantle (Camden & Gloucester Cities, Camden County)	Excavation of contaminated soil	\$10,000,000

Figure 11

Jersey since the early 1980s, paying for all costs related to Remedial Investigation/Feasibility Studies and Remedial Designs and covering 90 percent of Remedial Action and Long-Term Remedial Action costs at these sites. USEPA allocates Superfund money to the states on a Federal Fiscal Year basis (October 1st through September 30th) and the amount that New Jersey receives varies each year.

In 2001, the Division of Publicly Funded Site Remediation authorized the commitment of approximately \$27 million in Corporate Business Tax funds: \$10.8 million for Remedial Investigation/Remedial Action Selections, \$198,000 for Remedial Designs, \$14 million for Remedial Actions, and \$1.6 million for Operation and Maintenance activities. In addition, \$272,000 was authorized for Unknown Source Ground Water Investigations and to study several landfills being addressed under NJDEP's Landfill Closure Initiative. The amount authorized for commitment exceeded the amount received in part due to Corporate Business Tax funds carried over from the previous year, and in part due to the availability of excess Corporate Business Tax funds from previous authorization balances that were cancelled.

During Federal Fiscal Year 2001, USEPA allocated \$76.7 million in Superfund money for cleanups at 12 Superfund sites in New Jersey. This sum included \$5.3 million in state matching funds that was provided by NJDEP for Remedial Action/Construction projects pursuant to federal Superfund requirements. A list of the sites that were allocated Superfund money for Remedial Actions, the types of cleanup actions implemented and the amount designated for each site is provided in Figure 11.

USEPA also committed \$17.3 million for site characterization work (Remedial Investigation/Feasibility Studies and Remedial Designs) at publicly funded Superfund sites

in New Jersey during Federal Fiscal Year 2001, with no state matching funds required. Altogether, almost \$94 million in Superfund money was allocated for Superfund investigation and cleanup work in New Jersey during the federal fiscal year. This brings to almost \$1.8 billion the amount of Superfund money USEPA has committed for the investigation and cleanup of contaminated sites in New Jersey since 1981, when the Superfund program began. Of this amount, roughly 74 percent, or \$1.3 billion, has been used for site cleanups, the phase of the remedial process that directly protects human health and the environment.

A list of all current Superfund sites in New Jersey, as well as those that have been fully remediated and removed from the National Priorities List, is included in the Appendixes section (Section IV) of this report.

Community Involvement Activities

The Site Remediation program is committed to involving citizens in the decision-making process during the remediation of contaminated sites. Federal Superfund legislation requires NJDEP and USEPA to conduct community relations activities during the investigation and cleanup of Superfund sites, including holding public meetings and establishing public comment periods before selecting final remedial measures. However, NJDEP's Site Remediation Program extends these activities to many non-Superfund sites as well. Many of the public meetings and briefings held by the Site Remediation Program in 2001 addressed non-Superfund sites.

The Site Remediation Program's Bureau of Community Relations held 17 public meetings or briefings related to Superfund and non-Superfund sites in the Division of Publicly Funded Site Remediation and Division of Responsible Party Site Remediation during 2001. Issues discussed included potable well sampling results, NJDEP's proposed remedies to provide clean drinking water to potable well contamination areas, and NJDEP's preferred remedial alternatives to address soil and ground water contamination. For example, NJDEP met with local officials and residents of Gallo-way Township, Atlantic County in June to explain a proposal to extend public water lines

to homes in the Genoa Avenue Ground Water Contamination area. In December, NJDEP held a public meeting in Marlboro Township, Monmouth County to detail a plan to excavate PCB-contaminated soil and conduct long-term ground water monitoring at the Arky Property, a former junkyard and illegal dump site.

The Bureau of Community Relations also disseminated written materials regarding remedial activities at contaminated sites in the state, distributing more than 2,500 informational documents to interested parties in 2001. These included fact sheets and public meeting notices that gave residents and officials firsthand information about remedial activities in their neighborhoods. When requested, the Bureau of Community Relations spoke to media representatives about the investigation and cleanup of various sites.

Finally, the Bureau of Community Relations' **Site Information Program** responded to roughly 2,700 requests for lists of contaminated sites and maps showing site locations. See page xxiv for details about this service.

An NJDEP representative briefs residents on cleanup actions at the Celotex and Quanta Resources sites, two responsible party cases located in Edgewater Borough, Bergen County, in August 2001. The briefing was held jointly with NJDHSS and USEPA.



Other Documents Available

The Site Remediation Program also publishes the *Known Contaminated Sites in New Jersey* report, which is a compilation of 12,648 sites with confirmed contamination that are being addressed by NJDEP with public funds or by private parties with NJDEP oversight. This report, which was last updated in April 2001, is available on the Site Remediation Program's web page and in printed format upon request. A brownfield redevelopment update that highlights recent remedial activities and reuse projects at brownfield sites across the state is also released periodically.

Other documents available for parties interested in the remediation of contaminated sites in New Jersey include: the SRP News (published periodically), Guidance Document for Remediation of Contaminated Soils (1998), Alternative Ground Water Sampling Techniques Guide (1994), and the Field Sampling Procedures Manual (1992). Regulations and technical guidance documents are also available.

For more information about NJDEP's Site Remediation Program, contact the Bureau of Community Relations at (609) 984-3081 or visit the program's web site at <http://www.state.nj.us/dep/srp>.

The Site Information Program

The Site Information Program is a free service offered by the Site Remediation Program that provides potential home buyers, real estate agents, nonprofit housing organizations, financial institutions, developers and other individuals involved in real estate transactions in New Jersey with specific information on known contaminated sites near their properties of interest. Administered by the Bureau of Community Relations, the Site Information Program employs NJDEP's Geographic Information System (GIS), a computerized mapping system that contains the names and locations of more than 10,000 sites on the New Jersey Known Contaminated Sites List, as well as other environmental information. By entering the address of a particular property or its approximate location into the GIS program, the Department generates a map that shows the locations of all known contaminated sites within a half mile or a mile radius of that property, as depicted below. The requestor is also provided with a list of Known Contaminated Sites for the municipality in which their property of interest is located. General information about contaminated sites, referrals to other units within NJDEP and detailed fact sheets for Superfund sites and other high profile sites can also be obtained through this outreach and education program. The Site Information Program can be contacted toll free at 800-253-5647.

